

**ACTIVE TERMINATION CIRCUIT AND METHOD FOR CONTROLLING THE
IMPEDANCE OF EXTERNAL INTEGRATED CIRCUIT TERMINALS**

ABSTRACT OF THE DISCLOSURE

An active termination circuit is used to set the input impedance of a plurality of input terminals. Each of the input terminals is coupled to a supply voltage through at least one PMOS transistor and to ground through at least one NMOS transistor. The impedances of the transistors are controlled by a control circuit that generates a first control signal to set the impedance of another PMOS transistor to be equal to a first predetermined resistance, and generates a second control signal to set the impedance of another NMOS transistor to be equal to a second predetermined resistance. The first control signal is used to control all of the PMOS transistors and the second control signal is used to control all of the NMOS transistors. As a result, the PMOS and NMOS transistors coupled to each input terminal have impedances corresponding to the first and second resistances, respectively.